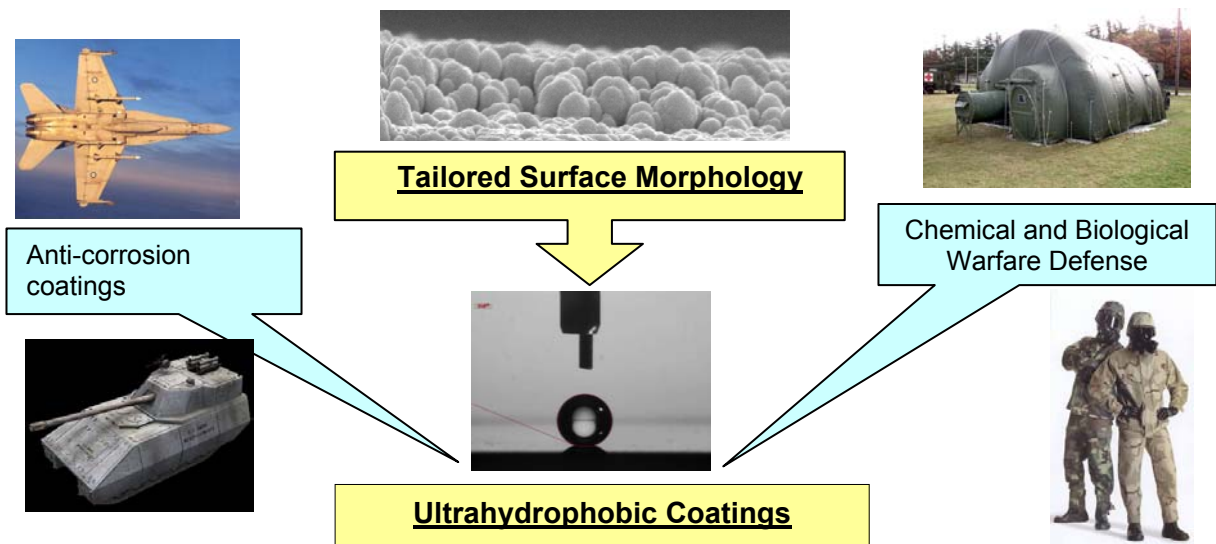


Ultrahydrophobic Coatings

Recent discoveries have linked the mechanism for the self cleaning of a lotus plant to a microscopic morphology leading to ultrahydrophobic surfaces (i.e. surface contact angle with water $>150^\circ$). This finding has sparked the interest of numerous researchers to develop a biomimetic approach to producing the same effect. The prospect of producing surfaces that repel water have huge opportunities in the area of corrosion inhibition for metal components, chemical and biological agent protection for clothing, antifouling for marine vehicles, among many other applications. Different approaches have been successful at achieving very hydrophobic character by various methods resulting from purposeful surface modification. Although successful at producing water repelling surfaces, these approaches have generally been only of academic interest due to complexity, cost, and lack of applicability to practical uses. Luna Innovations and the University of New Mexico (UNM) have developed ultrahydrophobic coatings that are simple to apply using conventional techniques, and will be cost effective for widespread use in military and commercial applications.



Tailored coating surfaces result in ultrahydrophobic coatings for water repellency supporting many military and commercial applications